

## **Claims**

What is claimed is:

1. An apparatus for automatically exchanging components in soft-error testing of computer chips, said apparatus comprising:

5           a main body adapted to hold a plurality of components; and

an arrangement for automatically altering a configuration of said main body to move one of the components into a position formerly occupied by another of the components.

2. The apparatus according to Claim 1, wherein:

10           said main body comprises a rotatable disk; and

              said arrangement for automatically altering comprises an arrangement for rotating said main body.

3. The apparatus according to Claim 2, wherein the components are for being disposed at different locations along a circumferential dimension of said main body.

4. The apparatus according to Claim 1, wherein the components comprise beam degraders.

5. The apparatus according to Claim 4, wherein said main body comprises mounting media for mounting the beam degraders with respect to said main body in a manner permitting selective detachment of the beam degraders from said main body.

6. The apparatus according to Claim 5, wherein at least one of said mounting media is adapted to accept a component other than a beam degrader.

7. The apparatus according to Claim 6, wherein at least one of said mounting media is adapted to accept at least one of: a Faraday cup, a beam position monitor, and a beam intensity uniformity monitor.

8. The apparatus according to Claim 4, further comprising at least one additional main body adapted to exchange components in soft-error testing of computer chips.

9. The apparatus according to Claim 8, wherein said at least one additional main body comprises an arrangement for positioning into the path of a beam a device-under-test.

10. The apparatus according to Claim 8, wherein said at least one additional main body comprises an arrangement for positioning into the path of a beam at least one of: a

beam collimator, a Faraday cup, a beam position monitor and a beam position intensity monitor.

11. The apparatus according to Claim 1, further comprising an indexing arrangement to ensure precise positioning of the components.

5           12. A method of automatically exchanging components in soft-error testing of computer chips, said method comprising the steps of:

providing a main body adapted to hold a plurality of components; and  
automatically altering a configuration of the main body to move one of the components into a position formerly occupied by another of the components.

10           13. The method according to Claim 12, wherein:

the main body comprises a rotatable disk; and

said step of automatically altering comprises rotating the main body.

14. The method according to Claim 13, further comprising the step of disposing the components at different locations along a circumferential dimension of the main  
15       body.

15. The method according to Claim 12, wherein the components comprise beam degraders.

16. The method according to Claim 15, wherein said step of providing a main body comprises providing mounting media for mounting the beam degraders with respect to the main body in a manner permitting selective detachment of the beam degraders from the main body.

17. The method according to Claim 16, wherein at least one of the mounting media is adapted to accept a component other than a beam degrader.

18. The method according to Claim 17, wherein at least one of the mounting media is adapted to accept at least one of: a Faraday cup, a beam position monitor, and a beam intensity uniformity monitor.

19. The method according to Claim 15, further comprising the step of providing at least one additional main body adapted to exchange components in soft-error testing of computer chips.

15           20. The method according to Claim 19, wherein said step of providing at least one additional main body comprises providing an arrangement for positioning into the path of a beam a device-under-test.

21. The method according to Claim 19, wherein said step of providing at least one additional main body comprises providing an arrangement for positioning into the path of a beam at least one of: a beam collimator, a Faraday cup, a beam position monitor and a beam position intensity monitor.

5           22. The method according to Claim 12, further comprising the step of providing an indexing arrangement to ensure precise positioning of the components.

10          23. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for automatically exchanging components in soft-error testing of computer chips, said method comprising the steps of:

providing a main body adapted to hold a plurality of components; and  
automatically altering a configuration of the main body to move one of the components into a position formerly occupied by another of the components.